Application No. 10/560,644 Amdt. Dated: July 29, 2008

Reply to Office Action Dated: April 29, 2008

## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (currently amended) A high voltage insulating material, comprising:

at least a first material comprising a foam material; and

at least one second material distributed within the first material, the insulating material being contained in a casing of a high voltage device configured for insulating components of the device;

wherein the insulating material has an electrical conductivity and/or dielectric constant of which is changed by adding the at least one further second material such that when it is used in a the high voltage device, surface charge which gathers on the components of the device is substantially dissipated by increased electrical conductivity of the insulating material at least such that voltage flashovers are prevented between the components, and the voltage drops that occur during operation remain below flashover and/or breakdown voltages of the insulating material.

- 2. (currently amended) A high voltage insulating material as claimed in claim 1 in solid form, wherein the <u>further second</u> material is formed by at least essentially spherical particles which in terms of their size and/or their material and/or their coating and/or their filling and/or their fraction with respect to the overall insulating material are selected and dimensioned such that a desired electrical conductivity and/or dielectric constant of the insulating material is obtained.
- 3. (original) A high voltage insulating material as claimed in claim 2, wherein the spherical particles are hollow spheres with a diameter of up to about  $100 \, \mu m$ .
- 4. (original) A high voltage insulating material as claimed in claim 2, wherein the spherical particles are filled with a gas.

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5. (currently amended) A high voltage insulating material as claimed in claim 2, wherein the spherical particles are formed of glass and/or a ceramic and/or phenolic resin and/or an acrylonitrile copolymer or another insulating material.

6. (original) A high voltage insulating material as claimed in claim 2, wherein the spherical particles have a coating consisting of an electrically conductive material.

7. (currently amended) A high voltage insulating material as claimed in claim 2, wherein the spherical particles have a coating consisting of a material that improves the adhesion between the particles and a the basic substance (adhesion promoter).

8. (original) A high voltage insulating material as claimed in claim 2, wherein the spherical particles are embedded in a basic substance to which there is added an adhesion promoter for improving the adhesion between the particles and the basic substance.

9. (withdrawn) A high voltage insulating material as claimed in claim 1 in liquid form, wherein the further material for changing the electrical conductivity is formed by a first substance dissolved in a liquid basic substance.

10. (withdrawn) A high voltage insulating material as claimed in claim 9, wherein the basic substance is an insulating liquid such as a transformer oil and/or an ester liquid and the first substance is an aromatic and/or an alcohol.

11. (withdrawn) A high voltage insulating material as claimed in claim 1 in liquid form, wherein the further material for changing the dielectric constant is formed by a second substance that is added to a liquid basic substance.

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12. (withdrawn) A high voltage insulating material as claimed in claim 11, wherein the basic substance is an insulating liquid such as a transformer oil and/or an ester liquid and the second substance is a castor oil.

- 13. (previously presented) A high voltage generator comprising an insulating material in solid form as claimed in claim 1.
- 14. (currently amended) A high voltage generator as claimed in claim 13, wherein the electrical conductivity and/or the dielectric constant of the at least one insulating material is selected such that a loading with DC voltage and/or AC voltage field strengths that is at least substantially adapted to the dielectric strength of the insulating materials can be achieved.
- 15. (previously presented) An X-ray system having a high voltage generator as claimed in claim 13.